DEPARTMENT OF THE AIR FORCE
WASHINGTON 20330

OFFICE OF THE UNDER SECRETARY

24 January 1979

MEMORANDUM FOR DR. COOPER

SUBJECT: IRSSS Inputs

I thought it might be useful to provide you some thoughts on the subjects of Terms of Reference and Report Outline. Attached please find both a draft Terms of Reference and a suggested Report Outline. I believe the Report Outline suggested here follows a little more logically than the one we discussed in our last meeting with you. Our group discussed these topics in some detail. While I know of no substantive disagreements with other members, their complete concurrence probably should not be assumed at this time.

Charles W. Cook
Deputy Under Secretary
(Space Systems)

Attachment:
1. Draft Terms of Reference
2. Report Outline

NASA, USAF reviews completed

DRAFT TERMS OF REFERENCE (IRSSS)

The Integrated Remote Sensing System Study will examine options for integrating current and potential remote sensing systems into a national system.

The initial phase of the study will focus on discovering such cost and technical advantages that may be achievable through integration at the technical and functional levels of remote sensing. User sensing requirements will be generated independently--without regard to current system capabilities, security limitations or management and funding constraints--to discover what civil, commercial and military remote sensing needs exist as well as to find meaningful candidates for integration with civil systems. The study should review current, mid- and long-term requirements, with each agency applying appropriate weighting factors on its requirements and providing statements as to the value of the information desired. Remote sensing will be operationally defined to mean looking down, from space, at the Earth, the earth's limb, or the near-earth environment.

Current and programmed collection, communication and ground systems will be arrayed against these requirements and examined technically for integration potential. R&D Programs tht may be responsive to long-term requirements should also be identified. Engineering trade-offs, cost saving potentials, and design ideas will be pursued. Finally, concepts for not-now-programmed integrated systems that might replace current systems will be reviewed.

After completing the engineering judgment portion of the study, the final phase will focus on management, funding, security control and organizational

issues in an attempt to discover what cost and technical advantages might accrue from programmatic or institutional integration. Consideration will be given to areas of concern in policy, legislative, international affairs, and organizational dynamics. Data access and handling problems as well as tasking, priority and dissemination issues--from peacetime through wartime scenarios--will be dealt with.

Incompatibilities, if any, between civil and national defense system needs will be reviewed. Funding and management plans will be discussed to determine the overall effects of an integrated system.

Candidate applications, systems and sensors will be explained for possible integration. Determinations will be made as to whether integration would provide marginal, clear or overwhelming cost and technical advantages.

Consensus recommendations, based on organizational voting, for both technical/functional and programmatic/institutional integration possibilities will be submitted to the Policy Review Committee (Space) by August 1, 1979. Those organizations not agreeing with the majority opinion on specific issues will append exception language to the recommendation.

Approved For Release 2005/02/15 : CIA-RDP83M00171R002300090006-8

INTEGRATED REMOTE SENSING SYSTEM STUDY

(REPORT OUTLINE)

I. Executive Summary

II. Introduction
- a. Origins of the Study
- b. Terms of Reference
- c. Definitions/assumptions

III. Factors Relevant to Integration
- a. Technical Advantages
- b. Cost
- c. Advantages of Duplication
  - (1) Cross-Checking
  - (2) Competition
  - (3) Survivability/backup
- d. Management Approaches
- e. Data Policy
- f. National Security
- g. Foreign Policy
- h. Implementation Problems

IV. Possibilities for Integration
- a. Remote Sensing Requirements
  - (1) Non-classified
  - (2) Classified (in an Annex)
- b. Sensor/platform Systems
  - (1) Current
  - (2) Programmed
  - (3) Future
    - (a) Current (non-integrated) Track
    - (b) Integrated Approach
- c. Data Handling and Analysis
- d. Tasking Mechanism
- e. Management Arrangements

V. Options (not necessarily mutually exclusive)
- a. Continue ad hoc coordination/integration along with encouraging agencies to achieve cost and technical advantages.
  - (1) Pros
  - (2) Cons
- b. Integrate at the Subsystem/sensor level for the following candidate systems: X, Y, Z

(1) Pros
(2) Cons

c. Integrate at the platform level through creation of a master remote sensing machine
(1) Pros
(2) Cons

d. Integrate at the management level by merging current space organizations into a single focal point arrangement
(1) Pros
(2) Cons

e. Others

VI. Recommendation

a. Decision
b. Implementation Approach

APPENDICES

a. Relevant legislation and policy
b. Remote sensing (classified) requirements
c. Results of related studies.

SUBJECT: Integrated Remote Sensing System Study

LOG NO.: S 185

DATE OF ITEM: 1/24 RECEIVED: 1/25

D/PAQ COMMENTS:

25X1A

DISPOSITION:

FILE: IRSSS new file

ACTION:

COORDINATE WITH:

SUSPENSE:

EA COMMENTS:

Destroy